Se Technical Sub Committee
April Meeting

April. 4, 2019
3:00 p.m. -- 4:00 p.m. MST

In attendance: Karren Jenni, David Janz, Joe Skorupa, David DeForest, Cindy Meays, Theresa Presser, Joe Beaman, Jody Fisher, Lauren Sullivan, Michel Ryan-Aylward, Sheldon Reddekopp, and Myla Kelly

Meeting Summary

Introduced Lauren Sullivan, new Se TSC Co-Chair from MDEQ.

Meeting objective: to facilitate a discussion on the data analysis work plan, discuss questions and clarifications, and capture additional comments from Se TSC members on the data analysis work plan.

Background of the data analysis work plan by Myla Kelly from MDEQ. Myla outlined the development of the data analysis work plan. MDEQ and BC ENV expressed support and gratitude to the Se TSC for the development of the plan and for providing additional comments and feedback.

Co-Chairs outlined that comments and questions on the data analysis work plan will be documented and circulated to the Se TSC. It was clarified that there would be opportunities in the future to raise questions and provide feedback if the Se TSC was not able to get through everything in this meeting.

Questions about specific sections of the proposed plan were discussed including the following:

Section 1.0

- Clarification: The finalized levels of protection and alternative/scenarios will be reached in separate consultation meetings between BC ENV, MDEQ, and key resource management partners. Se TSC members are also invited to provide recommendations.

US EPA clarified the background on how Levels of Protection were developed and recognized that the initial scenarios in the proposed plan were intended as jumping-off points for consideration by the regulatory agencies. Members also flagged that the sooner those levels can be identified the sooner work on the modelling can proceed and the Co-Chairs committed to providing that info as soon as possible, targeting the end of April.

Section 2.0

- Question: Should it be assumed that fish are feeding in what is functionally a lentic reservoir? Does this contradict the analytical step state in Section 4.0 regarding sub-models for different parts of the reservoir?

- USGS clarified this assumption is only for the purposes of modelling; this is not to be interpreted that the entire reservoir is a lentic system at all times in all locations.
- Discussion led to consensus that the lentic constraint is appropriate.

- Question: What is meant by Se loading profile?
  - USGS clarified this refers to selenium load in pounds throughout the year. Explained that there is a profile for reservoir operation. This part of section 2.0 is meant to capture management operations, so that the criterium is protective all year long.
  - US FWS added that this is a statement to indicate that the modeling would be done in a way that would not simply apply to average conditions, that the modeling would be done to maintain protectiveness even during non-average conditions.
- Question: How does maximum dietary exposure get characterized?
  - USGS clarified that would depend on what food web was being considered; benthic food webs are proposed to be used as controlling variable vs. water column food webs. So benthic food webs are expressed here as maximum dietary exposure.

Commented [DD1]: I don't agree that consensus was reached that the lentic constraint is appropriate. My opinion was that it is appropriate to evaluate and model subareas of the reservoir (which was also proposed in the workplan). The site-specific data will inform whether subareas of the reservoir are behaving as a lotic system or a lentic system.

Commented [DD2]: I believe from the discussion that it could be clarified that all food webs would be evaluated, as relevant to each of the fish species modeled, but these would include benthic food webs, which are expected to have the highest dietary exposure concentrations.

Section 3.0

- Question: What is meant by population value?
  - US FWS clarified that this is a placeholder left open for where the population metric would be added.
  - This issue was flagged to further discuss:
    - What are the statutory levels of protection?
    - Will the population metric match what the claimed level of protection is?
- Question: Do we protect at the species level or population level?
  - US FWS identified their organization's responsibilities under the Endangered Species Act are to protect at the species level
  - This issue was flagged to further discuss:
    - Protection at a species level or population level

Commented [DD3]: I recommend the notes also capture Dave Janz's comments about the heterogeneity of Se in aquatic systems, which can result in under- or overestimation of Se risk if individual fish are evaluated.

Section 4.0

- **This section was not discussed during the call.**
  - At the end of the meeting, it was suggested that the USGS will include a few check in times at certain points of the analysis.

Section 5.0

- Question: Will the BAF approach be focused on high bioaccumulators? Could all species be included? If it we did need to focus, should we be limiting it to high bioaccumulators?
  - Discussion clarified that the BAF model would be used as a point of comparison with the mechanistic model. USEPA suggested that given limited resources it was proposed to focus on a subset of specific fish species.
  - This issue was flagged to further discuss:
    - Who will do BAF model work; would they need a more detailed scope of work?
    - Which species to use?

On the topic of selenium speciation analysis (discussed at previous SeTSC meetings), members suggested reaching out to the lab to acquire information about their quality assurance and quality control procedures, considering their proprietary methods.

Co-Chairs committed to providing information about processes for moving forward with the committee.

Early May was agreed upon as a target for next SeTSC, members-only call. Mich will circulate doodle polls and a meeting summary.

Co-Chairs committed to providing any alternate scenarios or levels of protection to Se TSC one week in advance of the next SeTSC meeting, targeting the end of April.